

### **REMARKS**

Applicants have carefully reviewed and considered the final Office Action mailed on February 3, 2003.

By way of this amendment, claims 1, 8, 17, 21, 45, and 55 are amended; no claims are canceled or added; as a result, claims 1-23 and 31-59 remain pending in this application.

#### **Amendments to Claims 1, 8, 17, 21, 45, and 55**

Each of independent claims 1, 8, 17, 21, 45, and 55 has been amended by adding the language “of metal” after “adhesion layer” (first occurrence). Support may be found, for example, on page 7, lines 20-21, of the original specification. No new matter has been introduced.

#### **Rejection of Claims 1-3, 8-10, 13-14, 17-23, 45, 50, and 55-56 under §102(e) as Anticipated by Daves**

Claims 1-3, 8-10, 13-14, 17-23, 45, 50, and 55-56 were rejected under 35 USC §102(e) as being anticipated by Daves et al. (U.S. 6,091,603). Applicants do not admit that Daves is prior art and reserve the right to swear behind Daves as provided for under 37 C.F.R. §1.131.

Daves discloses an integrated circuit package (FIG. 2) having a chip 600, a thermally conductive compliant material 200, a heat spreader 104, an understructure 103, and a lid 101. Daves discloses that the thermally conductive compliant material 200 is preferably a thermally conductive paste, grease, or compliant material such as those described in U.S. Pat. Nos. 5,094,769; 5,098,609; or 5,167,851 (refer to col. 5, lines 37-42).

Daves fails to disclose each of the structural elements recited in claim 1, as amended. For example, Daves fails to disclose “an adhesion layer of metal coupled to the surface” of the die. The element that the Examiner is equating to Applicants’ adhesion layer is thermally conductive compliant material 200, and that element is apparently not described as a metal within Daves, insofar as Daves is understood.

For the above reasons, claim 1 should be found to be allowable over Daves, and Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. §102(e) as anticipated by Daves be withdrawn.

Claims 2-7, which depend from claim 1 and incorporate all of the limitations therein, are also asserted to be allowable for the reasons presented above.

Independent claims 8, 17, 21, 45, and 55 each contain the limitation of an “adhesion layer of metal”, so these claims, as well as all claims that depend directly or indirectly from them, should also be found to be allowable, for the reasons presented above with regard to independent claim 1.

Applicants consider additional elements and limitations of claims 1-3, 8-10, 13-14, 17-23, 45, 50, and 55-56 to further distinguish over Daves, and Applicants reserve the right to present arguments to this effect at a later date.

**Rejection of Claims 4-5 and 11-12 under §103(a)**  
**as Unpatentable over Daves in View of Patel**

Claims 4-5 and 11-12 were rejected under 35 USC §103(a) as being unpatentable over Daves et al. in view of Patel (U.S. 5,396,403).

Applicants respectfully assert that independent claims 1 and 8 distinguish over Daves for the reasons presented earlier. Thus, all of the claims dependent from claims 1 and 8 are likewise asserted to distinguish over Daves. Applicants respectfully request that the rejection of claims 4-5 and 11-12 under 35 U.S.C. §103(a) as unpatentable over Daves be withdrawn.

Applicants consider additional elements and limitations of claims 4-5 and 11-12 to further distinguish patentably over Daves, and Applicants reserve the right to present arguments to this effect at a later date.

**Rejection of Claims 6-7, 15-16, 31-44, 46-49, 51-54 and 57-59  
under §103(a) as Unpatentable over Daves**

Claims 6-7, 15-16, 31-44, 46-49, 51-54 and 57-59 were rejected under 35 USC §103(a) as being unpatentable over Daves et al.

Applicants respectfully assert that independent claims 1, 8, 17, 21, 45, and 55 distinguish over Daves for the reasons presented earlier. Thus, all of the claims dependent from claims 1, 8, 17, 21, 45, and 55 are likewise asserted to distinguish over Daves. Applicants respectfully request that the rejection of claims 6-7, 15-16, 31-44, 46-49, 51-54, and 57-59 under 35 U.S.C. §103(a) as unpatentable over Daves be withdrawn.

Applicants consider additional elements and limitations of claims 6-7, 15-16, 31-44, 46-49, 51-54, and 57-59 to further distinguish patentably over Daves, and Applicants reserve the right to present arguments to this effect at a later date.

**Conclusion**

Applicants respectfully submit that claims 1-23 and 31-59 are in condition for allowance, and notification to that effect is earnestly requested.

The proposed amendments to independent claims 1, 8, 17, 21, 45, and 55 should be entered by the Examiner, because they do not raise new issues that would require further consideration and/or search. On page 9 of the final Office Action dated February 3, 2003, the Examiner observed that the adhesion layer was not recited as a metal in claims 1, 8, 17, 21, 45, and 55, indicating that the Examiner was previously familiar with this issue.

The proposed amendments should be held to overcome the rejections set forth in the final Office Action dated February 3, 2003. However, if the Examiner holds that they do not overcome such rejections, Applicants respectfully request that the Examiner enter the proposed amendments for purposes of appeal.

The Examiner is invited to telephone Applicants' attorney Walter W. Nielsen at 602-298-8920 or the below-signed attorney to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

BISWAJIT SUR ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
612-349-9592

Date April 3, 2003

By Ann M. McCrackin  
Ann M. McCrackin  
Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Box AF, Commissioner of Patents, Washington, D.C. 20231, on this 3rd day of April, 2003.

Name: Anne M. Richards

Signature: Anne M. Richards